

REMARKS/ARGUMENTS

This Reply is filed in response to the final Official Action for the second request for continued examination (RCE) of the present application. Initially, Applicant appreciates the Examiner taking the time to conduct a second telephone interview with Applicant's undersigned attorney regarding the first Official Action. The final Official Action continues to reject Claims 1-21 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,991,528 to Taylor et al. As explained during the second telephone interview and below, however, Applicant again respectfully submits that Claims 1-21 are patentably distinct from Taylor. Accordingly, Applicant traverses the rejection of Claims 1-21 as being anticipated by Taylor. In light of the remarks presented herein, Applicant respectfully requests reconsideration and allowance of all of the pending claims of the present application. Alternatively, as the remarks presented herein do not raise any new issues or introduce any new matter, Applicants respectfully request entry of this correspondence for purposes of narrowing the issues upon appeal.

Again, Taylor provides an expert manufacturing system that generates a manufacturing plan for producing a part in an automated manufacturing system. The expert manufacturing system generates a multipurpose manufacturing geometry definitions file (MGDF). The MGDF can then be used by an expert manufacturing system to generate the manufacturing plan in the form of a neutral source code file. The neutral source code can then be converted to machine-specific program code directly executable by a device controller, such as a logic controller or motion controller. The expert manufacturing system can also be used to generate a drawing of the part, as well as to simulate the manufacturing plan for producing the part.

More particularly, Taylor explicitly discloses and illustrates in FIG. 2 (reproduced below) an expert system generates, from a MGDF **80**, a manufacturing plan in the form of a process data file **104**. Motion/process data generation programs **110** convert neutral source code in the process data file to code, such as NC/CNC motion data, executable by device controllers, where the conversion creates code for each device controller. In addition and in parallel, the motion/process data generation programs may convert the neutral source code into motion data files **114** for each device controller, where the motion data files are thereafter passed to a

motion/process verification program 120 for simulating operation of the device controllers.
Taylor Patent, col. 8, ll. 17-55.

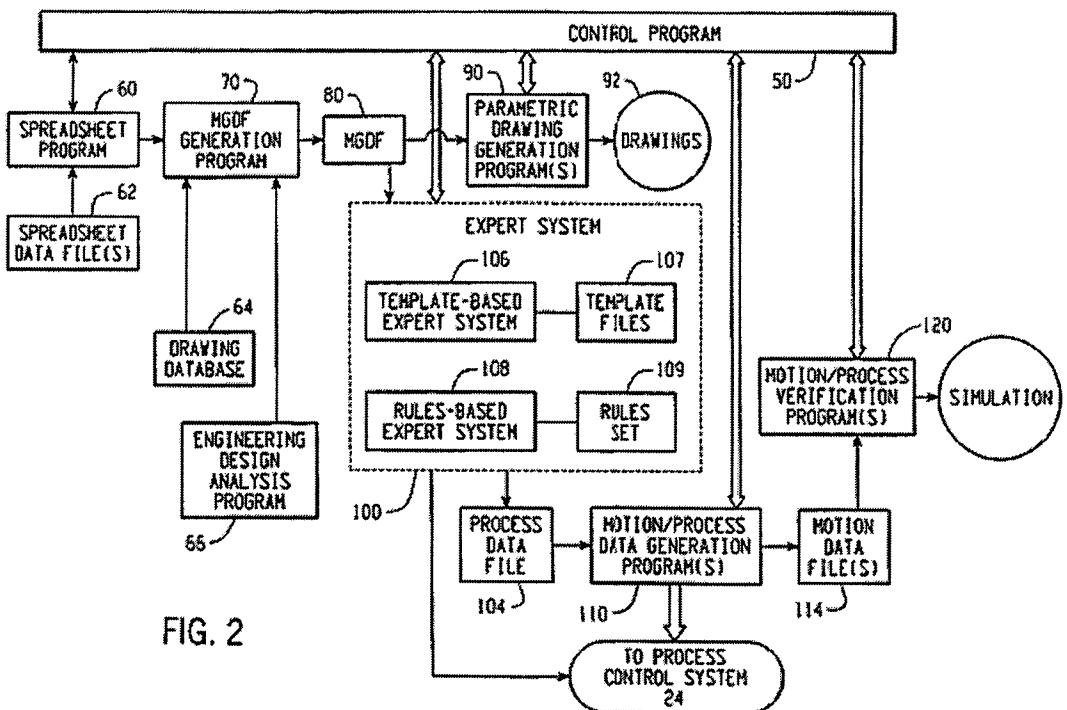


FIG. 2

As recited, independent Claims 1, 8 and 15 provide a method, system and computer program product for controlling the operation of one or more motion devices by directly implementing electronic simulation information, where the motion device(s) comprise one or more controllable element. The method of independent Claim 1, and similarly the system and computer program product of independent Claims 8 and 15, includes extracting process information from the electronic simulation information. In this regard, the electronic simulation information is representative of information regarding the motion device(s), and is further representative of information regarding the object(s) when the motion device(s) are configured to operate on one or more objects. Also, the electronic simulation information comprises information that has been configured for simulating operation of the motion device(s) produced by a set of operation information.

As further recited by the claimed invention, the process information can be formatted into neutral process information, where the neutral process information is in a format independent of a format of the electronic simulation information. The neutral process information can then be

interpreted into operation information for each of the controllable element(s) of the motion device(s), and as such, the operation information depends on a type of the motion device(s). After interpreting the process information into operation information, the operation information can be distributed to the controllable element(s) to thereby control the operation of the motion device(s).

As previously explained, although Taylor and the claimed invention are both directed to manufacturing systems, the claimed invention is patentably distinct from the system disclosed by Taylor. More particularly, in contrast to independent Claims 1, 8 and 15, Taylor does not teach or suggest electronic simulation information that has been configured for simulating operation of motion device(s), where process information can be extracted from the electronic simulation, formatted, interpreted and distributed as operation information to control motion device(s).

Again, consider for the sake of argument (again expressly not admitting) that the motion/process data generation programs **110** of Taylor convert neutral source code to NC/CNC motion data that corresponds to the recited operation information for controlling the operation of device controllers. *See Taylor, col. 8, ll. 17-36.* Also consider for the sake of argument that the motion/process data generation programs **110** of Taylor also convert neutral source code to motion data files **114** that correspond to the recited electronic simulation information having been configured for simulating operation of the device controllers. *See id. at col. 8, ll. 25-55* (explaining that program code generated by motion/process data generation programs **110** may be stored in motion data files **114**, which may be retrieved by motion/process verification programs **120** for providing a computer simulation of the manufacturing processes included in the manufacturing plan). As can be clearly seen, then, Taylor discloses that the motion/process data generation programs **110** generate operation information (e.g., NC/CNC motion data) in parallel with electronic simulation information (motion data files **114**), and accordingly, the operation information is not generated based on the electronic simulation information. In contrast, in accordance with the claimed invention, the operation information is generated through a number of steps beginning with electronic simulation information, and thus, the operation information is generated based on the electronic simulation information.

Appl. No.: 09/942,872
Amdt. dated 10/11/2006
Reply to Official Action of July 12, 2006

Applicants note the Examiner's agreement with the interpretation of Taylor whereby the motion/process data generation programs **110** of Taylor convert neutral source code to NC/CNC motion data that corresponds to the recited operation information for controlling the operation of device controllers. Given this interpretation of Taylor by the Examiner, and as the claimed invention recites operation information being derived from electronic simulation information, Taylor must disclose electronic simulation information in the system before the motion/process data generation programs **110** of Taylor convert the neutral source code to NC/CNC motion data to even arguably anticipate the claimed invention. In this regard, as cited by the Examiner, the MGDF **80** of Taylor corresponds to the recited electronic simulation information. To the contrary, however, Applicants respectfully submit that the MGDF of Taylor cannot reasonably correspond to the recited electronic simulation information having been configured for simulating operation of motion device(s), as explained below.

As support for the proposition that the MGDF **80** of Taylor corresponds to the recited electronic simulation information, the Examiner cites the following passage of Taylor:

The manufacturing data in MGDF 80 thus is sufficient to produce engineering drawings of the part, for expert system 100 to generate a manufacturing plan in the form of a process data file 104 having information for producing program code for device controllers, and for producing a computer simulation of the manufacturing plan for manufacturing the part.

Final Official Action of July 12, 2006, page 7 (citing Taylor, col. 7, ll. 13-19) (emphasis in original). Applicant respectfully submits, however, that the above passage does not support the proposition that the MGDF **80** of Taylor corresponds to the recited electronic simulation information having been configured for simulating operation of motion device(s). In this regard, the above passage explains that the MGDF includes data sufficient for an expert system 100 to generate a manufacturing plan in the form of a process data file **104**. The passage continues by explaining that the process data file 104, and not the MGDF as asserted by the Examiner, includes information for producing program code, and for producing a computer simulation.

Moreover, Applicant respectfully submits that disclosing data (e.g., MGDF **80**, process data file **104**, etc.) including information for producing other data (e.g., program code, computer simulation – i.e., motion data files) does not necessarily translate to that data corresponding to

Appl. No.: 09/942,872
Amdt. dated 10/11/2006
Reply to Official Action of July 12, 2006

the other data that may be produced therefrom. That is, Taylor disclosing that the process data file **104** includes information for producing a computer simulation (i.e., motion data files) does not necessarily translate to the process data file corresponding to the computer simulation. And similarly, even if Taylor did disclose that the MGDF **80** includes information for producing a computer simulation (i.e., motion data files), it would not necessarily follow that the MGDF corresponds to the computer simulation, as alleged by the Examiner.

For at least the foregoing reasons, Applicant respectfully submits that the MGDF **80** of Taylor cannot reasonably correspond to the electronic simulation information of the claimed invention. And accordingly, Applicant also respectfully submits that Taylor does not teach or suggest extracting, from electronic simulation information configured for simulating operation of motion device(s), process information that can be formatted, interpreted and distributed as operation information to control motion device(s), as recited by the claimed invention. Thus, Applicant respectfully submits that independent Claims 1, 8 and 15, and by dependency Claims 2-7, 8-14 and 16-21, are patentably distinct from Taylor, and that the rejection of Claims 1-21, under 35 U.S.C. 102(b) as being anticipated by Taylor, is overcome.

Appl. No.: 09/942,872
Amdt. dated 10/11/2006
Reply to Official Action of July 12, 2006

CONCLUSION

In view of the remarks presented above, Applicant submits that the present application is in condition for allowance. As such, the issuance of a Notice of Allowance is therefore respectfully requested. In order to expedite the examination of the present application, the Examiner is encouraged to contact Applicant's undersigned attorney in order to resolve any remaining issues. As explained above, no new matter or issues are raised by this Reply, and as such, Applicant alternatively respectfully requests entry of this Reply for purposes of narrowing the issues upon appeal. It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



Andrew T. Spence
Registration No. 45,699

Customer No. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111

ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON October 11, 2006.

LEGAL01/13020775v1